



**Kaiser-Hill**

## **PROJECT BASELINE DESCRIPTION**

### **Remediation, Industrial, and Site Services Project**

**Rocky Flats Environmental Technology Site  
Closure Project**

**June 30, 2000**

**Approved:**

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**Project Manager**

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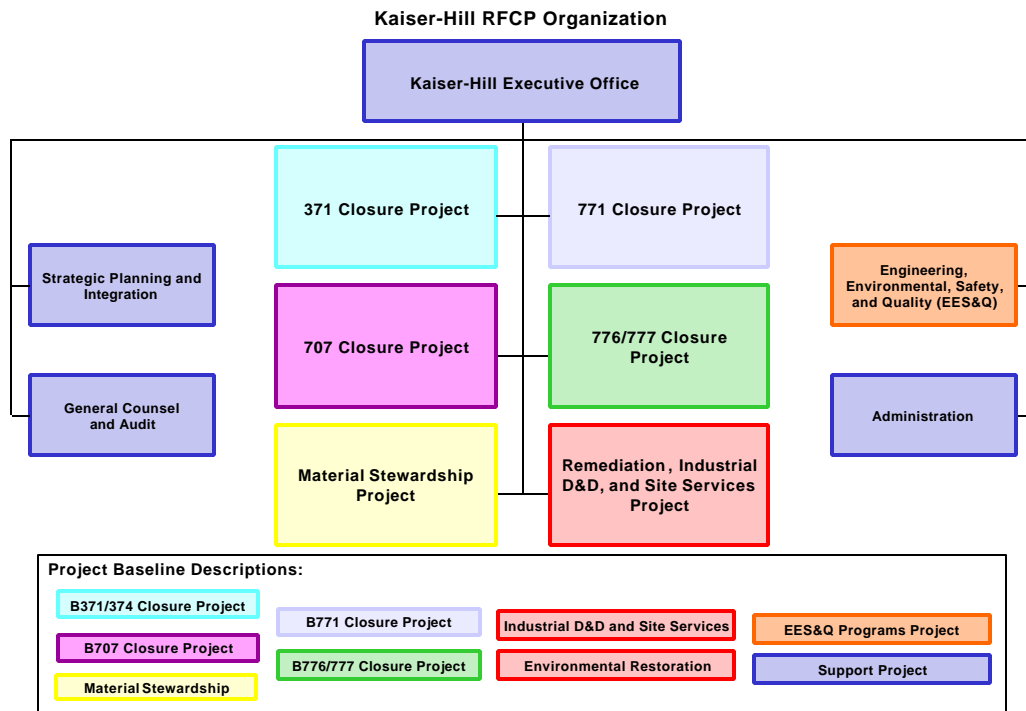
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## PROJECT BASELINE

The following section will define the scope of work for the Remediation, Industrial and Site Services (RISS) Project. The scope information will provide a basis for detailed planning. The Rocky Flats Closure Project (RFCP) organization under the new contract is shown in Figure 1.



**Figure 1: 2006 Closure Projects**

## 1. Scope

This Project Baseline Description (PBD) addresses the industrial, site services, and construction portion of the RISS Project. The remediation work is presented in the Environmental Restoration (ER) PBD. This PBD cost account structure is presented below:

### E—Industrial and Site Services Project

EA—Industrial and Site Services Project Management	ED—400 Area
EAA—Project Management	EDA—400 Area Project Management
	EDB—400 Area Facilities Management
EB—Site Services	EDC—400 Area Deactivation
EBA—Site Services Project Management	EDD—400 Area Decommissioning
EBB—Utilities	
EBC—Emergency Services	EE—800 Area
EBD—Property and Logistics	EEA—800 Area Project Management
EBE—Facilities Maintenance and Services	EEB—800 Area Facilities Management
	EEC—800 Area Deactivation
EC—Construction	EED—800 Area Decommissioning
ECA—Construction Project Management	
ECB—Misc. Construction Projects	EF—100/300/500/900 Area
	EFA—100/300/500/900 Area Project Management
	EFB—100/300/500/900 Area Facilities Management
	EFC—100/300/500/900 Area Deactivation
	EFD—100/300/500/900 Area Decommissioning

The overall scope of this PBD includes the following:

- Project Management,
- Site Services (excluding nuclear buildings),
- Construction,
- Industrial building facility management functions, stabilization/hazard removal, and decommissioning (400 Area, 800 Area, and 100/300/500/900 Area), and
- Decommissioning of Material Stewardship buildings,

#### 1.1.1 EAA – Project Management

This WBS element includes the scope for programmatic support including cost and schedule reporting and controls; coordination with Closure Project planning; coordination with other Site organizations, regulators, and citizen groups. Routine administrative support, supplies and training are also included in this WBS element.

#### 1.1.2 Site Services

The purpose and technical strategy of Site Services is to provide support services and utility operations to the Site Projects, and integration of services amongst the Site Projects to effectively support, when required, all mission critical activities for Site closure. Utility and infrastructure services directly reflect the Site's needs; as such, Site Services will scale down, as appropriate, as the Site reaches closure.

The Site Services WBS element consists of project management, utilities, emergency services, property and logistics, and facilities maintenance and services.

#### **1.1.2.1 EBA – Site Services Project Management**

Project management involves the overall management of the WBS element to include project controls, administration, and subcontracting and procurement. This activity provides program oversight and integration for electronic maintenance, support facility operations and maintenance, utilities, metrology, filter services, property management, excess property disposition, facility planning, food service, laundry, emergency preparedness, fire operations and shift superintendents.

This WBS element also contains shift superintendents. Shift Superintendent Operations serve as the management contact during three shift operations at the Site – 24 hours a day, 7 days a week. The Shift Superintendent performs Occurrence Reporting Coordination, acts as Incident Commander, and is the senior management contact on Site through decommissioning when the assigned senior management is not available. Shift Superintendent operations will continue through the end state.

#### **1.1.2.2 EBB - Utilities**

The operations and maintenance of the Site Utility Systems, the Sewer Plant, the Building 891 Groundwater Treatment Plant, the ER decontamination pads and the Buffer Zone Dams and Ponds will be maintained until the deactivation/closure of a significant number of Site facilities is achieved, as appropriate. As facilities are deactivated, the affected portions of the utility systems will be deactivated. Site utilities management provides safe and compliant management, oversight, and administration of all operational activities related to the five primary utility functions (water, steam, electrical, gas, and nitrogen) performed at the Site. In addition, Site utility management includes the management of the transition of the utility systems from an active operational state to full cold shutdown in preparation for deactivation and decommissioning.

##### **1.1.2.2.1 Water Utility Strategy**

The Water Treatment Plant, the potable water/fire water storage, and distribution system will continue to be operated and maintained until the end of FY04. The fire water storage tank 215C and the fire water pumping station B928 will be shutdown at the end of FY04. Beginning in FY00, water for decommissioning dust control activities will be drawn from the raw water distribution system. The raw water supply system from Ralston Reservoir, the raw water pond, and the on-site raw water distribution system will remain in operation through the end of the third quarter of FY05. Prior to the point in time that the sewage lines are shutdown (projected to be the end of the second quarter FY04), restroom trailers will be installed in the vicinity of remaining occupied buildings. These trailers will be connected to the Site potable water system and will have their own sewage collection tanks. The potable water treatment plant, storage tanks, and distribution system will be a candidate for accelerated closure in the event that fire protection requirements for remaining buildings in the FY04 and FY05 timeframe can be eliminated and potable water requirements are reduced to the points that they can be satisfied by water delivered from offsite.

#### **1.1.2.2.2 Nitrogen Plant Strategy**

The Nitrogen Plant and the gaseous nitrogen distribution system will continue to be operated and maintained until all of the category 1 and 2 SNM is shipped offsite, which is scheduled for the end of FY02.

#### **1.1.2.2.3 Steam Utility Strategy**

The Steam Plant will continue to be operated and maintained until the end of FY03. When no longer needed, designated sections of the steam distribution system will be isolated and deactivated in conjunction with the deactivation of buildings that are supported by a designated distribution system. In FY03, the Site will lease and install two portable truck mounted boilers capable of meeting Site steam requirements through the remainder of Site closure. The portable boilers will be operated and maintained until FY05. It is anticipated that based on the heating requirements for the remaining buildings following the end of the second quarter of FY05, there will be no further Site steam production or distribution activities.

#### **1.1.2.2.4 Gas Utility Strategy**

The natural gas distribution system will continue to be operated and maintained until FY05/early FY06. When no longer needed, designated sections of the natural gas system will be isolated, purged, and deactivated in conjunction with the deactivation of buildings that are supported by a designated distribution section. To avoid overhead gas line interference with any remediation, compressed natural gas or propane storage tanks will be installed at Buildings 376 and 995 prior to the end of FY03 to provide a heating source for these buildings until their closure. All remaining portions of the natural gas distribution system will be shutdown by FY06.

#### **1.1.2.2.5 Electrical Utility Strategy**

The high voltage electrical distribution system will continue to be operated and maintained until FY05/early FY06. When no longer needed, designated sections of the electrical distribution system will be isolated and deactivated in conjunction with the deactivation of buildings that are supported by a designated distribution section. Substation 515/516 and 132 were deactivated/shutdown in FY00. Substations 679/680 and 517/518 along with some portions of the electrical distribution system will continue to be operated and maintained until FY05/early FY06. Activities requiring electrical power after the end of FY05/early FY06 will provide their own source of power.

#### **1.1.2.2.6 Sewer Plant and Sewer lines Strategy**

The sewer plant and associated sewer lines are projected to remain in operation until FY04 for the treatment of sewage from Site facilities. After that the sewer plant will only treat wastewater generated from the ER project to remediate, flush and foam the Site sewer lines.

#### **1.1.2.2.7 Building 891 Consolidate Water Treatment Facility Strategy**

The Building 891 Groundwater Treatment Plant will remain in operation FY05/early FY06 to support water treatment needs from ER operations to include wastewater generated from the ER decontamination pads.

#### **1.1.2.2.8 ER Decontamination Pads Strategy**

The ER Decontamination Pads will remain in operation until FY05/early FY06 to support decontamination of wheeled equipment used for ER activities.

#### **1.1.2.3 EBC - Emergency Services**

The emergency services WBS element contains fire department operations, emergency operations, emergency planning, and hazards assessment.

##### **1.1.2.3.1 Fire Department Operations**

The fire department operations portion includes emergency medical services, fire tactical operations, hazardous material response, fire prevention, fire training and support services. This operation supports three shifts for around the clock fire response. Emergency medical response will continue until personnel strength on Site is reduced. In FY04, ambulance service will decrease to one ambulance and will be supported by off Site capabilities through Mutual Aid Agreements.

Tactical fire response will continue as long as fire response requirements are warranted for the Site. It is projected that tactical operations will operate through FY03 to support nuclear fire fighting operations and will decrease after FY03 to industrial fire fighting operations.

Hazardous material response includes hazardous material response capabilities and support to Industrial Hygiene and offsite emergency response agencies. This service will continue as long as hazardous materials are maintained on site.

Fire prevention includes fire inspections and support to Fire Protection Engineering and Fire Alarm Maintenance. This function will continue as long as fire systems are maintained in facilities. Fire training and support services include training and certification programs, as well as support maintenance for SCBA and expendable equipment. This function will continue as long as firefighting services are provided.

Fire operations will remain consistently funded through FY00 to FY03. Fire operations will be moved to an offsite location in FY04, and will support both municipal and onsite fire fighting per contractual agreement as part of the outsourcing activity for the Fire Department.

#### **1.1.2.3.2 Emergency Management**

The emergency management portion includes emergency operations, planning, and hazard assessments. Emergency operation entails operation of the Emergency Operations Center (EOC), emergency preparedness training, Site drill and exercise program, and support to the building programs. Emergency planning entails the development of emergency plans and procedures, and the development of the building specific emergency response operations procedures tailored for the hazards within each building. Hazard assessment involves the determination of hazards and respective scenarios within the facilities that provide the basis for emergency planning and response. Hazards assessment also involved the determination of emergency planning zone parameters that identifies potential response requirements by the public to identified hazards.

Emergency management is accomplished by subcontracted services. During FY02, emergency management activities will decrease in requirements for hazard analysis in several of the high hazard facilities. During FY03, emergency management activity decrease due to SNM and holdup elimination, which decreases planning basis hazards for the Site. Emergency management activities will continue from an offsite location in FY04. During FY05, emergency management activities will be limited to transportation emergency response activities and RAP support. Emergency response activities will be terminated at the end of FY05.

#### **1.1.2.4 EBD - Property and Logistics**

The scope of work under this WBS element includes the activities of property administration, software maintenance, excess property/surplus property disposition, Asset Management Pilot Program funded projects, plant and road service maintenance, snow removal, weed control, hot laundry operations, protective clothing laundry, respirator acceptance test, lease administration, department administration, building support, facility layouts, management and oversight of integrated facility management, office space inventory, personnel relocations, and cold laundry support.

##### **1.1.2.4.1 Property Administration**

Property administration involves the identification and control of accountable property, including maintenance of databases, such as the Property Equipment Management System (PEMS) that are used to account for property. The property management system also involves the requisition, cataloguing, and screening for accountable property items, which average about 18,000 items annually. This element also includes the management and accountability of real property that has no value. Property administration will complete closeout of property accounts and final accountability of property items in FY05. During FY 06, property administration will complete the closeout of all records, archive records and final accountability of property items.

##### **1.1.2.4.2 Excess Property/Surplus Property Disposition**

Excess property disposition involves the identification of processing and disposal of excess accountable property on site. During transition to closure, it is estimated that 630,840 items of excess property will be disposed. Ninety-eight percent of these items will be disposed by the end of FY05, with the remaining items disposed in FY06. Some property will be disposed as waste in the decommissioning



process, estimated at approximately 30% that will be disposed as waste, approximately 300,000 lines will be disposed through the PU&D Excess Property Disposition process in FY00 through FY06.

#### **1.1.2.4.3 Asset Management Pilot Program**

This activity involves the allocation of funds from DOE, RFFO from the revenues obtained through the sales of excess property. The AMPP will be funded as funds are made available through sales and provided to the contractor through direct allocation and authority for expenditure. The level of funding for this program is dependent on the amount recovered from property sales and will vary from year to year.

#### **1.1.2.4.4 Plant and Road Service Maintenance**

Plant and road service maintenance includes a centralized support service to provide heavy equipment operations to support earth moving, excavation, snow removal, road maintenance, and vegetation control. This activity is accomplished by an outsourced organization under subcontract. Services will be provided to meet minimum requirements for continued support operation on Site, but do not include any capital improvements to the infrastructure. All snow removal activities are consolidated in this activity. Minor road repairs and signage are accomplished as necessary for safe travel over existing road systems. Weed control within this WBD element is accomplished for the Protected Area for security purposes, and in the buffer zone for environmental purposes. Weed control for security purposes will be discontinued as the need for security perimeter in the Protected Area is eliminated. Weed control in the buffer zone will continue as directed by ecological requirement to the end state of the Site. Road repairs and heavy equipment operations for Site support will be terminated when the services are no longer required.

#### **1.1.2.4.5 Laundry Operations**

This activity includes the provision of laundry services for both hazardous material and non-hazardous material work, and includes respirator services to support this work. Laundry services are provided by subcontract service through Nuclear Service at the Hanford site. The service collects dirty laundry at the Site and provides cleaning of this laundry at a special facility designed to launder potentially contaminated clothing and respirators. Laundry is transported to RFETS for distribution to the job site by the Site transportation activity. Laundry costs are not incurred within the activity, but are distributed to the end users through the respective Projects. All laundry activities, including the oversight of subcontracted services, are funded through incremental funding within the cluster based on the number of items used. It is projected that annual use for Anti-C clothing is 8,000-10,000 sets of clothing per week, with modesty clothing use at 8,000 sets per week. Respirator use is projected at 500 items per week.

Laundry activities are projected to increase to 10,000 sets of clothing per week in FY01 and remain constant through FY03. During FY04 and FY05, laundry requirements are projected to decrease ending in FY05.

#### **1.1.2.4.6 Facility Planning**

Facility planning involves the identification of facility use through the decommissioning process, and the allocation of space for personnel on Site to support closure activities. Facility planning includes the identification and maintenance of real property records, determination of use of facility space, and assistance in relocation of personnel during decommissioning activities. Facility planning provides this activity through the Site Facility Use Plan, as negotiated with user needs for space.

This activity is responsible for the identification of space for relocation of personnel required to be moved by the decommissioning of previously occupied facilities. Funding and actual requirements for the relocation of personnel are provided in the decommissioning funding and are not provided by this activity.

Facility planning also manages lease agreements for Buildings 060, 061, and 070 and the Front Range Community College Reading Room, on behalf of DOE. Facility planning also manages and maintains status on the real property on Site, and supports identification of facility eligibility for decommissioning as transitioned from real property status.

Facility planning remains funded through FY00 to FY04, providing support for facility use management and relocation of personnel. Relocations will occur during this period dependent on the schedule for decommissioning. Those personnel that can be relocated for continuation of services within decommissioning activities will be moved to facilities that will remain toward the end of decommissioning activities (primarily in the administrative facilities of the T130 complex and building 116, 117, 119, 124, 130, 131, 460, and 850). Other personnel will not be relocated but are expected to leave the Site through attrition. During FY06, remaining workers at the Site will work from temporary construction sites or will be relocated off-Site pending closure of Site activities.

#### **1.1.2.5 EBE - Facilities Maintenance and Services**

The facilities and management services WBS element includes multi-cluster maintenance administration, control, and craft support; work control center; metrology laboratory; technical support and maintenance; fire alarms; life safety/disaster warning; security alarms; electronic maintenance support; radiation instrumentation; radios/cameras; filter services; garage maintenance and fleet management; building custodial services; and cafeteria/vending.

##### **1.1.2.5.1 Metrology Laboratories**

The metrology laboratories maintain Site-wide calibration standards. This activity supports the standards against which facility metrology technicians test their standards. The activity also includes calibration and certification of chemical, dimensional, non-destructive assay (NDA), and physical standards used to calibrate measuring and test equipment within the facilities. Once facilities are readied for decommissioning, metrology standards are applied to identify and characterize measurement and test requirements for compliance to National Institute of Standards and Technology (NIST) standards. Much of the testing relates to standards associated with the safeguards of special nuclear materials. As this material is transferred off-Site, the standards requirements in the facilities will be reduced. However, maintenance of Site-wide will continue as long as NDA testing continues for characterization of remaining facilities and infrastructure until the Site facilities are fully removed after decommissioning.

At this time, the metrology functions will involve the packaging and transfer of NIST standards, and the collection and arrangement for permanent storage of calibration and certification documentation.

Standards requirements in the facilities are maintained by metrology technicians assigned to these facilities. The activities of these technicians are controlled and funded under work authorizations from the supported Projects and not from funding within this WBD element.

It is expected that as facility standards requirements are reduced, the maintenance of Site-wide standards will also be reduced.

#### **1.1.2.5.2 Food Service Operation**

The food service activity involves the operation of the Site cafeterias and collection of proceeds from food service and vending contracts. Cafeterias currently in operation for FY00 include those operations in Buildings 130, 460, and 750, with vending operations contained in several facilities on Site and mobile food services. Food service operations do not require any funding from infrastructure projects, as this activity is fully funded from the proceeds from food sales and vending. Costs incurred for maintenance and replacement of food service equipment, labor, and food purchase are fully funded by revenues. Any facility modification required for modernization or expansion to food service capability is negotiated through respective building maintenance and operations costs. This activity also includes pest control for operating food services.

Cafeterias operations will remain constant through FY00 to FY03. Mobile food service activities will increase as decommissioning activities increase. Mobile food service will be obtained by subcontract activities and will operate by revenues obtained through sales and will not be supported by funding from infrastructure projects.

#### **1.1.2.5.3 Alarm and Alarm Instrumentation Maintenance**

Alarm maintenance provides on-Site maintenance of electronic systems, to include fire and security alarms, communications systems, maintenance control systems, and maintenance radiation instrumentation. Alarm maintenance activities are provided through funding within this activity to support scheduled preventative maintenance activities and alarm system testing and maintenance. Additional work may be required to support building specific systems maintenance activities that are funded within the specific building cluster.

Alarm technicians disconnect alarms on facilities ready for decommissioning in conjunction with support activities from the Fire Systems Services Subcontract. Alarm maintenance is reduced when the PA is collapsed and again when the PA is eliminated.

#### **1.1.2.5.4 Garage and Fleet Maintenance**

This activity will operate as long as vehicle support is required on Site. It is projected that significant vehicle reductions will occur after FY03 due to the removal of SNM and reduction of security requirements.

#### **1.1.2.5.5 Filter services**

Filter services involve the provision of filter change out and testing in the facility filter plena and air handling systems. This activity funds the management and part of the filter technician requirements for supporting filter changes. The remaining filter technician requirements are funded within the Project. Filter services provide replacement to filters on a scheduled basis through FY03.

### **1.1.3 Construction**

The scope of the construction is to self-perform Davis-Bacon covered work activities across the Site as requested and authorized by the RFCP organizations. Construction work is accomplished through the K-H Construction (KHC) group.

#### **1.1.3.1 ECA - Construction Project Management**

KHC manages and employs building trades personnel in various tasks supporting the Site mission. KHC provides supervision, safety oversight and quality assurance during all work activities including subcontracted work to ensure compliance with applicable safety/environmental regulations and practices. KHC works to the requirements of the ISM/IWCP principles and adheres to each building's operating requirements.

#### **1.1.3.2 ECB - Miscellaneous Construction Projects**

KHC has the capability to provide a variety of construction and maintenance type activities. KHC may subcontract work to local contractors as needed and when it is beneficial and cost effective. KHC also uses subcontractors to supplement Site resources during peak workload periods. The following are potential projects in the upcoming months:

- Building 371, Cooling tower replacement;
- Building 374, Valve vault enclosures;
- Building 371, Install stainless steel floor in C-cell;
- Building 371, Remove gloveboxes;
- Building 371, PFSR;
- Building 771, Breathing air system;
- Building 771, Install birdcage disassembly unit;
- Building 771, Install doublewide trailer;
- Building 777, Airlock installation; and
- Building 440, Demolition preparations.

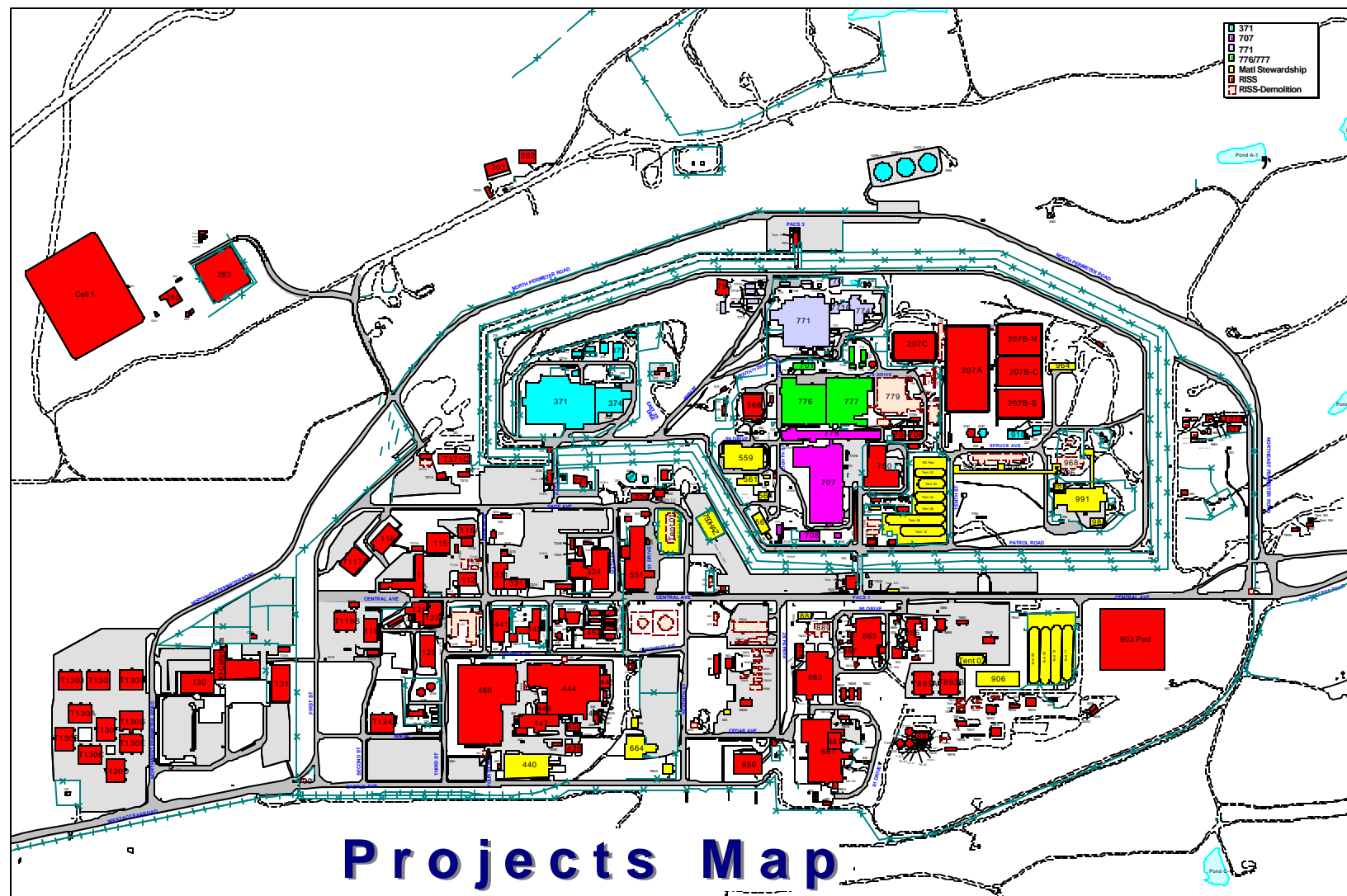
### **1.1.4 Industrial Facility Disposition**

Industrial facility disposition includes the facility maintenance, building stabilization/deactivation, and decommissioning of remaining clusters (i.e., not part of the 371, 707, 771, and 776). The scope also includes decommissioning of the facilities associated with the MSP once the facility mission and deactivation is complete. The approximately 350 facilities have been divided into three areas the 400 Area, 800 Area, and 100/300/500/900 Area. Figure 2 illustrates the facilities in the RISS Project. During the remaining portion of FY00 and FY01, industrial facility disposition will focus on hazards removal in the 400 and 800 Areas and the decommissioning of Building 111.

#### **1.1.4.1 EDA, EEA and EFA - Project Management**

Project management involves the overall management of the WBS element to include project controls, administration, and subcontracting and procurement. In addition, project management includes the necessary management and oversight of all work activities under this WBS element.

Figure 2. RISS Project Map



#### **1.1.4.2 EDB, EEB and EFB - Facilities Management**

Facilities management consists of all the activities to ensure that the facilities and immediate areas around the facilities are maintained in a safe, secure, environmentally compliant, and operable status until such time as the facilities are no longer needed. Facility management functions also ensure that the areas are prepared for transition to building stabilization and decommissioning. This includes area clean up and housekeeping. The five major activities necessary to ensure safe and compliant operations include:

- Compliance surveillance—Surveillance will be conducted to ensure safety systems and regulatory compliance are maintained. This includes daily or weekly inspection of Resource Conservation and Recovery Act (RCRA) regulated units, air monitoring systems, radiological surveys, and fire suppression systems as required.
- Maintenance—Maintenance will focus on building systems to ensure the facilities can be entered and work can be conducted without interruption. This is a minimal maintenance support package which only addresses the required activities to maintain the safety envelope. As areas in each facility are closed, systems and support will also be curtailed and resources will be shifted to closing other areas.
- Operations Management—The scope for operations management activities includes ensuring building functional operations, surveillance, and maintenance activities are carried out in an adequate manner, thus maintaining safe operations and regulatory compliance of the facilities. Also included is integration management and support as required of tenant and project activities performed within the area.
- Operations Technical Support—This includes the support functions required to complete work at the site and includes radiological engineering, health and safety, quality assurance, etc. These disciplines will be required when efforts begin to change the safety basis documents for the buildings.
- Safety Basis Revisions—Updates to the Site Safety Analysis Report (SAR) to address new activities are included as part of this function.

#### **1.1.4.3 EDC, EEC and EFC - Building Stabilization/Deactivation**

Building stabilization includes the activities necessary to remove a building from operation and place the building in a safe and stable condition that eliminates or mitigates hazards and ensures adequate protection to workers, the public and the environment. Stabilization occurs in buildings that do not have a deactivation phase, generally Type 1 and Type 2 facilities. Stabilization potentially results in additional baseline cost reductions by eliminating or reducing the need for surveillance and maintenance activities.

Stabilization includes the tasks of characterization; planning and project management; administrative stabilization; AB changes; and physical stabilization. Stabilization activities remove the cluster of buildings from operation, and prepare them for turnover -- possibly to a subcontractor -- for decommissioning or conversion/release to a new use meeting applicable safeguards, hazard category, and other applicable criteria.

Specific stabilization activities include preparing IWCP packages, performing removal of hazardous and non-hazardous materials, uranium holdup removal, and reduction of building fire loading. Activities may

include inventory and removal of unattached hazardous materials from the buildings and project areas, such as regulated hazardous chemicals, beryllium and gas cylinders, draining fluids from equipment, asbestos abatement and/or encapsulation, and repack of existing waste packages. RCRA units may be placed into a RCRA stable condition or the RCRA unit closure may occur. Disposition of excess property, in accordance with contractual requirements may be performed. Building stabilization is achieved when the building is in a safe and stable condition while awaiting further disposition and/or decommissioning.

Deactivation activities are conducted in Type 3 facilities. Deactivation are the activities necessary to remove a building from operation and place the building in a safe and stable condition that eliminates or mitigates hazards and ensures adequate protection to workers, the public, and the environment. Deactivation potentially results in additional baseline cost reductions by eliminating or reducing the need for surveillance and maintenance activities. The RISS Project assumes it only has one Type 3 facility, Building 559.

Deactivation includes characterization; planning and project management; administrative and physical deactivation; and AB modifications. Deactivation activities remove the buildings from operation, and prepare them for decommissioning and maintain compliance with applicable safeguards, hazard category or other completion criteria.

Specific deactivation activities include preparing IWCP packages, performing removal of hazardous and nonhazardous material, holdup removal, and reduction of building fire loading. Activities may include inventory and removal of unattached hazardous materials from the building and project areas, such as regulated hazardous chemicals, beryllium, gas cylinders, draining fluids from equipment, asbestos abatement and/or encapsulation, and repack of existing waste packages. RCRA units may be placed into RCRA stable condition or RCRA unit closure may occur. Disposition of excess property, in accordance with government property disposition requirements may be performed.

Deactivation includes removal of contaminated systems, system components, or equipment for the purpose of accountability of SNM and nuclear safety. It also includes removal of contamination incidental to other deactivation or for the purposes of accountability of SNM and nuclear safety. Deactivation does not include decontamination necessary for the dismantlement phase of decommissioning.

During FY00 and FY01, hazard removal will be initiated in Buildings 881, 444, and 447. Building 881 personnel will initiate hazard removal and property disposition. There are four areas that will be addressed during Building 881 hazard removal:

1. Physical hazards, which includes excessive combustible loading as well as poor housekeeping leftovers.
  - Room 313 et al. 2<sup>nd</sup> floor mezzanine (high combustible loading).
  - Rooms 247/248. Roof leaks in this area.
  - Room 161. Littered with leftover property.
  - Room 114. Electrical shop.



2. Radiological, beryllium or chemical hazards.

- Room 127A. Room excluded from the RFCA agreement due to high levels of unknowns.
- Room 114A. Room posted for high contamination levels, but largely unknowns.
- Room 224. Lab with potential Be problems, as well as other possible contamination.
- Room 10B. UPS/Battery systems (assumes CCF relocated).
- Room 17. Halon system (assumes CCF relocated).
- Rooms 108/110 et al. Smoke heads (assumes CCF relocated).

3. Combinations of the above.

- Room 317. 2<sup>nd</sup> floor mezzanine -- the Be area.
- Room 143. Suspected Be contamination.
- Room 137. 1<sup>st</sup> floor lab that has had no removals to date.
- Room 144. Storage room with disposable property as well as legacy waste.

4. Other hazard reduction activities might include:

- Disconnecting the natural gas supply by removing the meter (gas has already been LO/TO)
- Emptying the “rad contaminated” property from the trailer parked outside Dock 290
- Disconnecting all out-of-service equipment.
- Remove all gas cylinder racks in hallways.
- Remove 1,400 KW emergency generator and fuel tank.

Building 444 will also initiate hazard removal activities. The following bullets summarize the proposed stabilization/hazard removal activities:

- DU removal (Rooms 202, 204, 33A, 32, and 502 in Building 444 and Room 403 in Building 447)
- Legacy waste repackaging (over 600 drums)
- Gear case oil draining
- DU chip removal
- Property removal

#### **1.1.4.4 EDD, EED and EFD - Decommissioning**

Decommissioning is the activity necessary to remove a building from the Site in a safe manner that minimizes hazards and ensures adequate protection to workers, the public and the environment. Decommissioning includes the tasks of characterization; site preparation; decontamination; dismantlement; and demolition. Regulatory approval for decommissioning precedes the physical execution of decommissioning tasks. The decommissioning process, as implemented at RFETS, results in each building being dispositioned in accordance with the applicable regulations and requirements, whether as waste, recycle, or reuse.

Characterization supplies the data necessary to minimize hazards and ensure adequate protection to workers, the public, and the environment and has four phased elements: Scoping; Reconnaissance; In-process; and Pre-demolition Survey (including independent verification, if required). Decommissioning characterization does not cover the characterization associated with individual hazardous substance site (IHSS) remediation, which is part of ER, or any process characterization of special nuclear material (SNM).

Physical site preparation includes the establishment of laydown, shipping and material processing areas, set-up of size reduction, monitoring and waste staging areas, and step-off pads, and the removal of stored wastes.

Potential decontamination areas include building interior/exterior surfaces or other fixed structures, equipment, drains, gloveboxes, tanks, process piping, ducting. Removal of hazardous and toxic substances may be performed as a decontamination activity. Dismantlement involves the removal of equipment and piping. Dismantlement may also include the removal of interior walls, exterior walls and roofing. In general, decontamination and dismantling activities will be conducted simultaneously. It is assumed that all of the RISS Projects will perform decontamination and dismantlement activities in accordance with the *RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* with the exception of Building 559, which will require a building-specific Decommissioning Operations Plan (DOP) and Building 886, which has an approved Interim Measures/Interim Remedial Action (IM/IRA).

Demolition is performed on the walls, roof, non-structural and structural components, foundations and connecting structures in accordance with the RFCA decision document. It is assumed that all of the RISS Projects will perform demolition activities in accordance with the *RSOP for Facility Disposition* with the exception of Building 559, which will require a building-specific DOP and Building 886, which has an approved IM/IRA. Unless specified differently in the building RFCA decision document, subsurface concrete will be removed to a depth of three feet below the final proposed grade. Demolition rubble meeting free release criteria will be dispositioned in accordance with the *RSOP for Recycling Concrete*.

In order to perform the decommissioning activities, significant planning and engineering resources prepare the following major documents (as needed):

- Reconnaissance Level Characterization Report (RLCR);
- Pre-demolition Survey Report (PDSR),
- RFCA decision document (DOP; Proposed Action Memorandum (PAM); IM/IRA, or RFCA Standard Operating Protocol (RSOP));
- RCRA Unit Closure Plan/Closure Description Document (CDD);
- Health and Safety Plan (HASP);
- Integrated Work Control Program (IWCP) packages;
- Waste Management Plan;
- Training Plan;
- Utility Relocation Design Documents;

- Building Demolition Design Documents; and
- Equipment Removal Design Documents.

The development of work packages and plans requires the use of multiple support services such as: training; procurement and contract administration; security; fire protection; quality assurance/quality control (QA/QC); waste management and inspection; transportation; construction; radiological operations and engineering; Radiation Control Technician (RCT) support; medical and health; safety and industrial hygiene; shipping/receiving and warehousing; legal; regulatory interface; laundry; small tools and personnel protective equipment (PPE); analytical laboratory; toxic and hazardous material handling; utilities; property disposition; telecommunications and information resources; finance and administration; and planning and integration.

Completion of decommissioning results in the building area being assigned to the ER organization for any required remediation. Unless specified differently in the building RFCA decision document, it is assumed that all buildings will be demolished; all wastes are removed from the project area; and building foundations, utilities or other remaining structures are removed to a depth of three feet below the final proposed grade. Some trailers may be left in place for the ER organization to use during the remediation activities. For each project, a Project Completion Report will be completed, approved by DOE and the Lead Regulatory Agency (LRA), and placed in the Administrative Record in accordance with RFCA and other applicable requirements.

Building 111 decommissioning will be initiated in FY00 and completed in FY01. The decommissioning effort will include reconnaissance level characterization, asbestos abatement, demolition, backfill, and site regrading.

## ***1.2 Boundaries***

Figure 2 shows the RISS Project boundaries.

## **2. Budget**

The baseline budget is presented in Table 1.

# Table 1. RISS Project Baseline Budget

Burdened Cost (\$000)

Project/Cost Account		F00 Feb-Sep	F01	F02	F03	F04	F05	F06	F07	Total
E	Industrial and Site Services Project									
EA	Project Management									
EAA	Project Management	6,073	10,269	10,970	12,172	9,045	11,918	13,847	0	74,293
EB	Site Services	0								
EBA	Site Services Project Management	1,219	1,923	1,950	2,157	1,854	2,595	3,015	0	14,713
EBB	Utilities	2,883	6,151	7,470	7,508	6,385	5,476	5,226	801	41,900
EBC	Infrastructure	5,290	7,903	8,231	8,050	4,505	5,360	4,786	225	44,351
EBD	Property & Logistics	3,399	4,610	4,807	4,948	4,168	5,292	3,460	10	30,693
EBE	Facilities Maintenance and Services	7,357	15,279	15,250	15,396	10,318	13,581	0	0	77,180
EC	Construction									
ECA	Construction Project Mgmt	2,948	1,426	1,543	0	0	0	0	0	5,917
ECB	Misc. Construction Projects	3,287	0	0	0	0	0	0	0	3,287
ED	400 Area									
EDA	400 Area - Project Management	0	292	296	328	282	394	510	441	2,543
EDB	400 Area - Facilities Management	1,425	2,731	2,691	1,388	880	253	0	0	9,368
EDC	400 Area - Deactivation	0	4,686	5,222	1,066	2,176	1,187	0	0	14,337
EDD	400 Area - Decommissioning	0	0	0	10,202	43,806	27,908	13,732	0	95,648
EE	800 Area									
EEA	800 Area - Project Management	739	292	296	328	283	384	470	87	2,880
EEB	800 Area - Facilities Management	3,981	6,349	5,652	5,675	23	0	0	0	21,681
EEC	800 Area - Deactivation	167	7,474	13,703	2,124	0	0	0	0	23,469
EED	800 Area - Decommissioning	0	0	6,050	23,873	35,039	46,083	1,718	0	112,764
EF	100/300/500/900 Area									
EFA	100/300/500/900 Area - Project Mgmt	1,208	292	296	328	282	392	0	0	2,798
EFB	100/300/500/900 Area - Facilities Mgmt	2,195	2,583	2,597	2,776	679	1,092	0	0	11,922
EFC	100/300/500/900 Area - Deactivation	0	0	1,436	5,888	994	5,338	20	0	13,677
EFD	100/300/500/900 Area - Decomm'ing	193	3,611	1,188	1,673	59,612	26,192	29,238	45	121,754
EFE	100/300/500/900 Area - Mat'l Stew'ship									
Project E Totals:		42,365	75,872	89,647	105,879	180,331	153,447	76,022	1,609	725,172

Thursday, June 22, 2000

rev. 2

Source: Cost Account Flash Price Spread Report, Kaiser-Hill P&I Reporting System (rpt\_fps\_ca, Project: BaslDevI\_0622a)

FY00 Actuals from P&I Reporting System, FY00 May Database 6/28/00

### **3. Schedule**

The baseline schedule is on the following page.

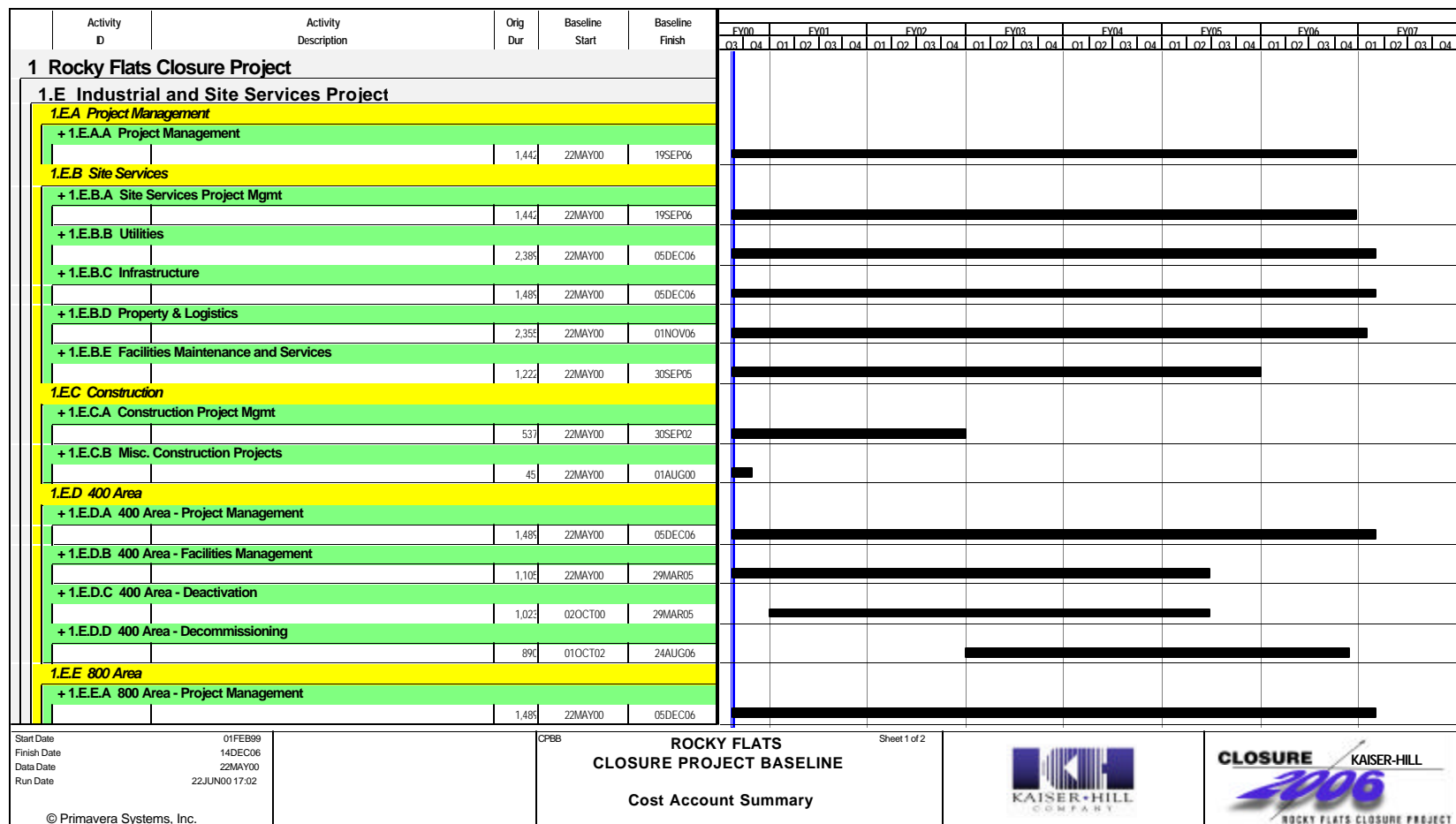


Figure 3: RISS Project Baseline Schedule (page 1 of 2)

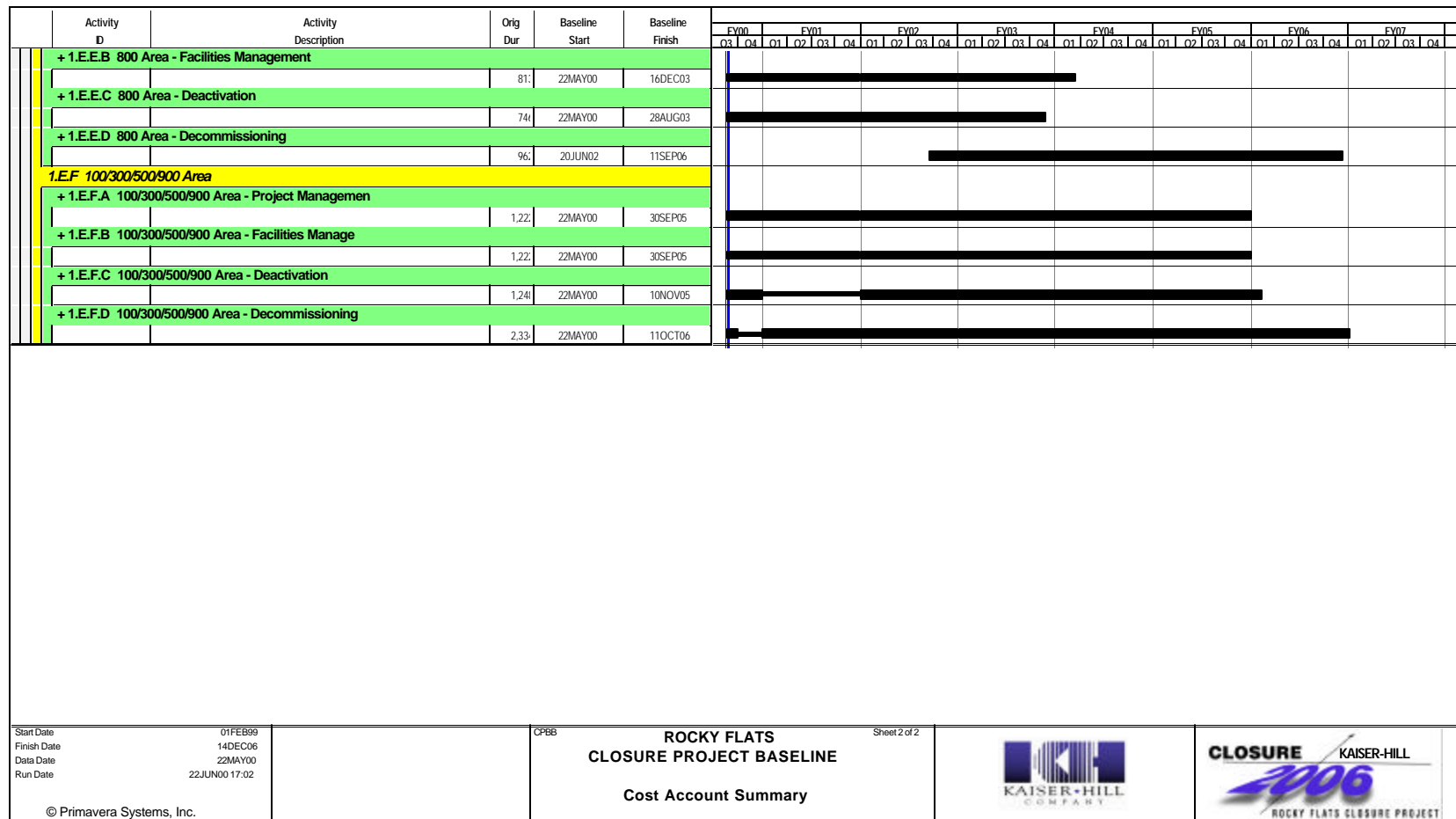


Figure 3: RISS Project Baseline Schedule (page 2 of 2)



#### **4. Assumptions**

The following are the general assumption associated with the RISS Project. The assumptions were summarized from the RISS PMP, which contains additional more detailed assumptions.

1. The current utility system will exceed Site service requirements.
2. No major repairs to facilities, facility systems, or site infrastructure will be required.
3. None of the RFETS utility systems will be privatized prior to Site closure in 2005.
4. No facilities will remain after 2005.
5. DOE will continue to procure utility services for the Site and fund for those services in their budget
6. The requirement in the McKay Settlement Agreement for the DOE to provide the capability to supply 20,000 gallons of potable water per day to the west boundary of the site will be resolved and/or terminated prior to the scheduled shutdown of the water treatment plant. Any costs associated with resolution will be borne by DOE.
7. Ownership of the land and remaining real property assets when physical completion is achieved will be transferred to the appropriate entity and fire protection responsibility will be assumed by the appropriate local jurisdiction.
8. No significant discoveries during dismantlement or final survey.
9. Waste volumes are based on square feet of floor space in buildings.

## 5. RISS Project Organization

This section describes the project organization structure. Figure 4 presents the organization chart for the RISS Project.

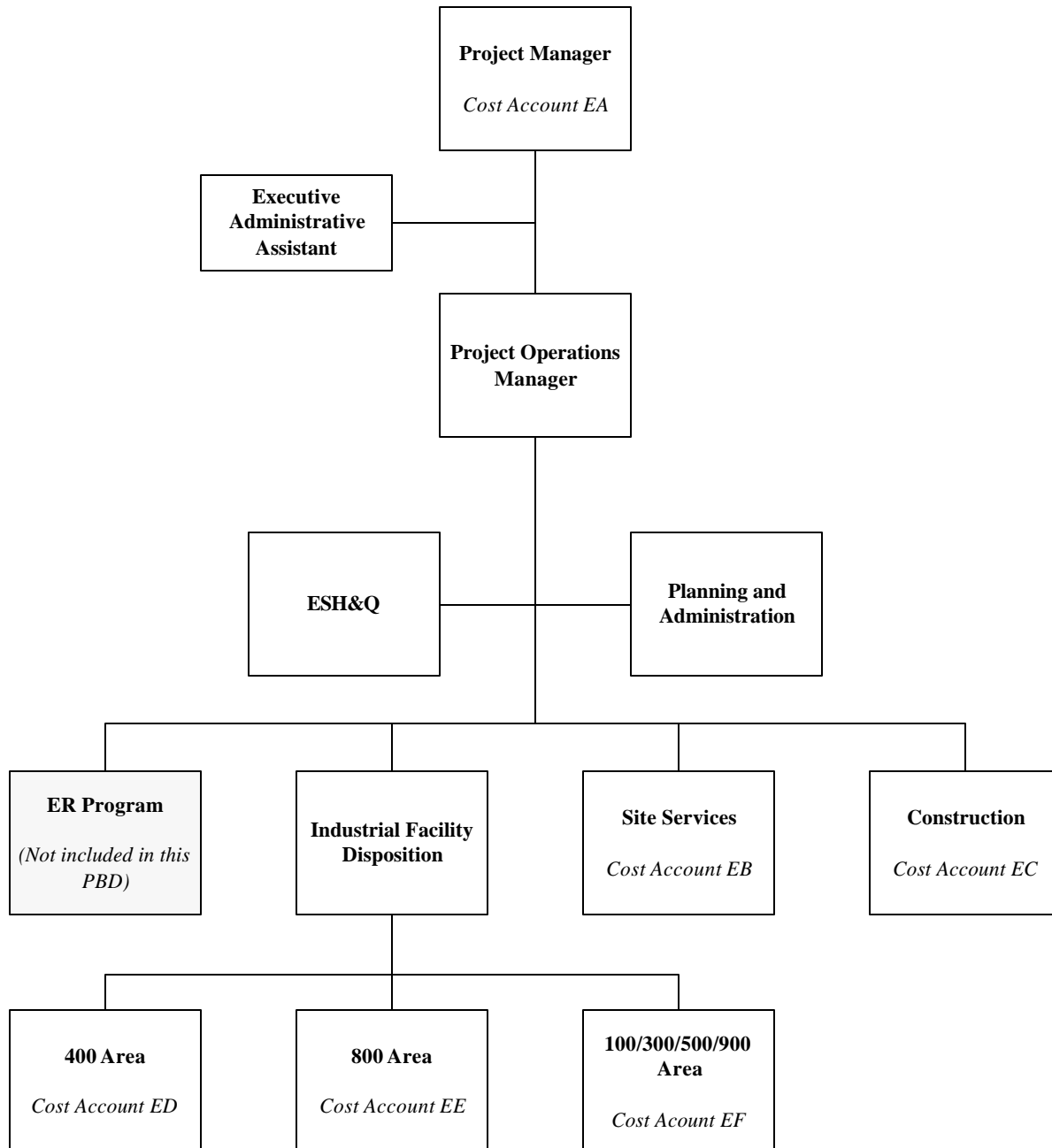


Figure 4. RISS Organization Chart